

AMENDMENTS TO THE SPECIFICATION

Please replace the following Paragraphs with the paragraphs rewritten in amendment format

[0018] (Fig. 8) Construction of the two hinge-Cy3 variants derived from hIgG3 by PCR. The templates were from pUC19 containing modified hIgG3 constant regions where the h4 exon were connected to the CH3 domain (A) or the h1 exon were connected to the h4 exon further connected to the CH3 domain (B) (Olafsen T et al, 1998). The primers inserted HindIII (5') and Sfil (3') restriction enzyme sites. The hinge and CH3 domain are connected by a triplicate of the amino acids GlyGlyGlySerSer. (Seq. ID No.: 42).

[0019] (Fig. 9) Construction of the hinge-Cy3 segments derived from mIgG2b. The hinge and the CH3 genes were amplified from a pUC18 vector containing the constant region of mIgG2b by PCR with two primers encoding a HindIII (5') and a Sfil (3') restriction enzyme site. The two PCR fragments were joined by PCR SOEing. In this reaction, the hinge and CH3 domain were connected by a triplication of the amino acids Gly-Gly-Gly-Ser-Ser. (Seq. ID No.: 42).

[0020] (Fig. 10) Construction of the scFv derived from the myeloma protein M315. The cDNA that functioned as a template in the PCR reactions were derived from mRNA extracted from MOPC315.4 cells. The V regions were joined by PCR SOEing resulting in a scFv. In this reaction, the V regions were connected by a triplicate of

GlyGlyGlyGlySer. (Seq. ID No.: 43). Furthermore, the gene fragments encoding the complete scFv were flanked by Sfil and Sall restriction enzyme sites.

[0021] (Fig. 11) Joining of the hinge-Cy3 segments and the M315 scFv by PCR SOEing. This reaction introduced the Sfil site 5' of the antigenic scFv encoding region. The linker sequence shown comprises GGGGSGGGSGGGS (Seq. ID No.: 43).

[0022] (Fig. 12) Subcloning of the hinge-Cy3-M315 scFv into pUC19. Three different dimerization motifs were included, derived from mIgG2b or IgG3. In all cases, they consisted of hinge followed by a triplicate of GlyGlyGlySerSer (Seq. ID No.: 43). and CH3. Two different hinges were derived from hIgG3, one consisting of h1 linked to h4, and one consisting of h4, only.

[0026] (Fig.16) Cloning of the V regions specific for NIP and MHCII. The V regions were amplified and joined by PCR soeing resulting in scFvs. The linker connecting the V regions consists of a triplicate of GlyGlyGlySer. (Seq. ID No.: 43). The gene fragments encoding the complete scFvs are flanked by Bsml/Munl and BsiWI sites. Linkers and restriction sites were introduced in the PCR reactions.

[0029] (Fig. 19) Detailed figure of Vaccibody gene construct. The targeting unit is inserted between the Bsml/Mfel and BsiWI restriction enzyme sites (The V cassette of the pLNOH₂ vector). The hinge-Cy3-Fv315 is inserted between the HindIII

and BamHI sites into the C cassette of pLNOH2. The hinge and the Cy3 domain as well as the two scFv's are connected with (G₄S)₃ linkers (Seq. ID No.: 43)(black boxes). The Cy3 and the Fv³¹⁵ are connected through a GLSGL linker. The Fv³¹⁵ is inserted between two nonidentical Sfil restriction enzyme sites. The antigenic unit and dimerization motif may be of any origin appropriate. Also, functional fragments of Cy3 may be employed, or a sequence which is substantially homologous to the Cy3 sequence or Cy3 fragments.